GROWING TOGETHER

Western Grain Transportation Efficiencies
A Discussion Paper
January 22, 1991

Prepared by officials from the Grain Transportation Agency, Transport Canada & Agriculture Canada

WESTERN GRAIN TRANSPORTATION EFFICIENCIES
A DISCUSSION PAPER

Think Recycling!

January 22, 1991

At the request of federal and provincial Ministers of Agriculture, this paper was prepared by federal officials from the Grain Transportation Agency, Transport Canada and Agriculture Canada. This discussion paper is intended to assist in consultation with industry and does not represent federal or provincial government policy.

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BACKGROUND

Since its implementation in 1984, the Western Grain Transportation Act has been the subject of numerous policy reviews. In July 1990 an industry-government Transportation Committee released a report which examined options for changes in current agriculture policies as part of a broader national Agri-Food Policy Review. The Western Grain Transportation Act was one of the main topics of the report.

Included in the Transportation Committee Report were numerous options concerning possible cost reduction and efficiency improvement measures which could be implemented to expedite the handling and transportation of Western Canadian grain to market. The report also outlined the implications of adopting the various options.

As the mandate of the Transportation Committee did not require it to reach consensus or to make recommendations, the options were presented without commenting on the relative merits of the various options or providing any combinations of options for consideration.

After presentation of the Transportation Committee Report at the federal/provincial Agriculture Ministers' meeting in Moncton, New Brunswick on August 23, 1990, the Ministers agreed on the importance of having the most efficient grain handling and transportation system possible. To address this goal, the federal government was given the task of preparing a paper for consultation with industry. The paper was to consider costs and efficiencies with and without a change in the method of payment of the government commitment under the WGTA.

PURPOSE

This paper has been prepared by federal government officials in order to facilitate further discussion on a number of important issues related to the efficiency of the grain transportation and handling system. The proposals put forward in this document are meant to help focus discussion during the next round of consultations and do not represent government policy decisions. Based on consultations with interested parties, the government will determine what changes to its policies and programs will be implemented in order to improve the efficiency of the existing system and, thereby, reduce costs to system participants and, in particular, to grain producers.

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MANDATE

Terms of reference were not provided to guide the development of the efficiencies paper. As the task was an obvious extension of the work initiated by the Transportation Committee, it was decided that the cost reduction and efficiency options contained in the Committee report would be evaluated further but the paper would not have to be restricted to that list of options. Where possible it was considered desirable to simplify procedures and reduce regulation as part of the package of proposals.

In developing an overall proposal for cost and efficiency measures it became apparent, for a number of reasons, that it would be beneficial to focus on the time period to the year 2000. In the year 1999 a further assessment could be undertaken to evaluate the results from the 1990's and to determine an appropriate policy for the early part of the next century.

THE METHOD OF PAYMENT ISSUE

The method of payment issue is the subject of a separate paper prepared by federal and provincial government officials. The method of payment paper will focus on a framework for "redirecting" the government commitment in the event that the government decides to opt for a change. One example of "redirecting" the government commitment would be to pay all or a portion of it to producers rather than the railways. It is noted, however, that the method of payment does have implications in terms of system efficiencies.

The fact that only rail movements are eligible for government subsidies and that such subsidies account for about two-thirds of the full rail freight rate reduces the incentive to shippers to seek alternative means of transportation that may be lower cost. Some improvements in the efficiency of the transportation and handling system would be expected if there was a change in the method of payment that resulted in the shipper paying all (or a high percentage) of the full rail freight rate. It is acknowledged, however, that method of payment is more than just an efficiency issue. As well, there could be significant additional costs for some affected parties if the method of payment were changed, depending on the nature of the change and how it was implemented. It is for reasons such as these that the method of payment has been the subject of extensive discussions.

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For the purpose of this efficiencies paper, it is assumed that if the government decides to change the method of payment, the change will be phased in over a number of years. Therefore, the proposals contained in this paper can generally be implemented with or without a method of payment change. Additional comments or explanation will be provided as necessary where the method of payment has significant implications for a particular issue or proposal.

II. WESTERN GRAIN TRANSPORTATION ACT

A brief explanation of the Western Grain Transportation Act (WGTA) is provided to help the reader understand the issues and the proposals that are contained in this paper.

The WGTA is a complex piece of legislation which provides for regulated railway freight rates for the transport of specified grain and grain products from western Canada to named destinations. The cost development, freight rate, and payment sections of the WGTA are the most pertinent provisions when evaluating potential cost reduction and efficiency improvement measures.

COST DEVELOPMENT

Railway costs for the movement of grain are comprised of line-related variable costs for the network of grain dependent branch lines in Western Canada, volume-related variable costs for the movement of grain to eligible destinations, plus a contribution to the constant or fixed costs of the railways which is set at 20% of the volume-related costs. For crop year 1990/91 these railway costs have been estimated as follows:

Volume of Grain to be Transported	33.3 M tonnes
Line-Related Variable Costs	$ 91.2 million
Volume-Related Variable Costs	818.9 million
Contribution (20% of Volume-Related)	163.8 million
Total Estimated Costs	$1073.9 million

The line-related variable costs relate to the 6388.2 miles of branch lines which were designated as grain dependent for crop year 1990/91. Grain dependent branch lines are designated annually by the National Transportation Agency (NTA) in advance of the commencement of each crop year. The prime determinant in deciding if a rail line is grain dependent is that the grain tonnage originating and terminating on the line is equal to or greater than 60% of the total tonnage originating and

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terminating on the line, based on the average of the three immediately preceding calendar or crop years. The vast majority of the grain dependent branch lines are protected from abandonment to the year 2000 under Prohibition Orders issued by the Governor-in-Council.

The volume-related variable costs are the costs, estimated by the NTA, for movement of the grain volume of 33.3 million tonnes as forecasted by the Grain Transportation Agency (GTA) Administrator.

FREIGHT RATES

The total estimated costs are used in the development of the freight rate scale which is designed to provide CN and CP with combined revenues equivalent to their combined estimated long-run costs for the transportation of western grain. The cost estimates and freight rates are determined annually by the NTA. The actual railway costs are reviewed once every four years by the NTA.

The freight rate structure is essentially a multiple of the distance-related statutory rate scale in effect prior to passage of the WGTA. Exceptions to this distance relationship exist to ensure equal rates to West Coast ports regardless of traffic routing and to ensure equal rates from specified competitive or contiguous origins.

The WGTA also provides for incentive rates wherein shippers and railways may negotiate a reduction in shipper freight rates subject to approval by the NTA. Application for incentive rates must take place 7 months prior to their coming into effect and must be in effect for a full crop year. The intent of incentive rates is to permit a sharing of rail productivity savings with shippers at efficient grain gathering points. To date incentive rates have had limited use.

PAYMENTS

The total annual government commitment is generally regarded as a fixed amount but is subject to adjustments which represent a balance between the interests of shippers, the railways, and the federal government at the time of the passage of the WGTA and subsequent amendments to the Act. The government commitment through the freight rate is not therefore a fixed proportion of annual freight rates. Only one component of the government commitment, namely the Crow Benefit of $658.6 million, is generally fixed.

Shippers are protected from inflation in excess of 6 percent per year in future railway costs and protected from shipper freight rates in excess of 10 percent of the weighted average grain price by the shipper share limitation adjustment provision. The federal government is largely protected from an increase in payments to railways as a result of increased volumes of grain moved.

Current Annual Government Commitment:

Crow Benefit	$ 658.6 million
Inflation Sharing	66.3 million
Total	$ 724.9 million

The shipper share limitation adjustment has not been triggered to date.

Before determining the proportion of the government commitment to be paid to CN and CP through the rate scale, deductions are made for the CN Adjustment plus estimated payments to other railways that transport western grain including BC Rail, Central Western Railway and Southern Rails Cooperative. The CN Adjustment is related to additional costs incurred by CN in the movement of grain to Churchill and Prince Rupert.

Estimated Payment of Government Commitment:

CN Adjustment	$ 17.9 million
BCR, CWR, Southern Rails	6.4 million
Freight Rates	700.6 million
Total	$ 724.9 million

III. BRANCH LINE RATIONALIZATION & ELEVATOR CONSOLIDATION

A cursory examination of the identified areas for potential cost reductions clearly indicates that if significant reductions are to be achieved there would have to be an increase in the rate of branch line rationalization and the rationalization process would have to be streamlined. This is a key ingredient in the development of a cost reduction and efficiency improvement package.

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Over the past few decades the rate of branch line rationalization on the prairies, compared to the rate of elevator consolidation, is a graphic illustration of the impact of controls on a regulated industry compared to an industry driven by economics.

Since 1960 the rate of branch line rationalization has gone through three complete cycles of activity. The early 1960's, 1975 and from mid 1977 through 1983 were active periods for abandonment. Between each of those peaks of activity abandonments virtually ceased and have progressed at a low level since 1984. In the mid-1977 to 1983 period abandonments averaged about 300 miles per year but since 1984 have averaged about 100 miles per year.

In contrast, rationalization of the prairie elevator system has been an on-going process since the 1930's when the number of elevators peaked. The rate of rationalization accelerated quickly in the 1970's and continued through the 1980's primarily due to the impact of the high inflation on operating costs, high replacement costs for an aging elevator system, higher volume throughput required at remaining elevators to justify capital expenditures and branch line abandonment.

Since January 1, 1984 when the WGTA became effective, abandonment activity has been minimal while rationalization of the elevator system has continued. Investments in new elevators as well as expansion and/or improvement of existing facilities in recent years have been concentrated on those lines most likely to be retained in the future. The net result of the significantly different rates of consolidation for branch lines and elevators has been the emergence of a higher percentage of branch lines with fewer elevators and a reduced volume of grain traffic for such lines.

HIGH COST BRANCH LINES

As many of the costs of operating a branch line do not vary with traffic, the average cost per tonne of grain handled increases when traffic volume decreases. Such branch lines have become known as high cost branch lines. It should be noted that this classification is more a function of the low traffic volume than an abnormally high cost structure. The high cost branch lines are in fact low traffic density lines if density is measured in such terms as carloads per mile of track.

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To the extent that grain dependent branch lines are abandoned, the line related variable costs are reduced as is the total cost determination for purposes of establishing the WGTA annual rate scale. The network of grain dependent branch lines currently costs $91.2 million in line-related costs. As well, the associated volume-related variable costs of grain gathering may be significant as a result of weight restrictions on these lines, which limit railways to the use of boxcars or light loaded hopper cars, and the use of single or small carlots to accommodate the low volume of traffic.

A 1986 Senior Grain Transportation Committee (SGTC) study concluded that the elimination of high cost grain dependent branch lines from the grain gathering network had the greatest potential as a rail cost reduction measure. A report from the provincial governments of Alberta, British Columbia, Saskatchewan, and Manitoba in 1988 also concluded that many factors, including the development of new technology, have rendered much of the branch line system very costly and that there is a need to develop a rail rationalization process which will lead to a lower cost and more efficient transportation system.

The preliminary results of a recent study conducted under the direction of the SGTC suggest that the net cost reduction in the transportation and handling of grain with the abandonment of some 1400 miles of high-cost grain dependent branch lines would be in the range of $25 to $30 million annually. These net savings result from an $18 million reduction in line-related rail costs together with reductions in associated volume-related railway costs and reductions in the operating costs of elevator companies for primary elevation. These latter savings involve a further consolidation of the network of primary elevators with an increase in grain handling turnover at remaining facilities. The total cost reductions were offset by an estimate of the increased costs associated with the increase in the length of local truck haul to arrive at a net figure.

If this is the case, why has the rate of branch line abandonment proceeded at a slow pace since the WGTA was implemented in 1984?

CURRENT RATIONALIZATION PROCEDURE

> As noted in the Transportation Committee report "Branch line rationalization is a two application process in which the railway must seek removal of protection from abandonment and then apply for abandonment."

At the present time almost all of the railway network in the three prairie provinces, plus the Peace River area of British Columbia, is protected from abandonment until the year 2000 by a series of branch line abandonment prohibition orders which were issued between 1974 and 1984. Effective January 1, 1988, when the National Transportation Act, 1987 (NTA, 1987) became law, the provision of the Railway Act which had previously authorized the creation of prohibition orders was repealed. No similar provision in contained in the NTA, 1987. Although no additional prohibition orders can be issued, all existing orders remain in effect until the year 2000 unless amended in the interim.

The Transportation Committee report noted the following difficulties encountered with the existing rail rationalization process.

> "In recent years the railways have filed a series of applications to have protection withdrawn from branch lines with little or no traffic. Approval in many cases has taken more than two years. Once protection is removed the railway must then apply for abandonment to the regulatory body which was the CTC prior to January 1, 1988 and is now the NTA. Notwithstanding less restrictive branch line abandonment regulations under the NTA, 1987, problems have been encountered in obtaining abandonment orders".

> "Since implementation of the WGTA in 1984, this two step rationalization process has cost grain shippers and taxpayers in general several millions of dollars while these little used or unused branch lines have proceeded through this process. Political involvement at various levels has contributed to this situation".

As previously noted, since implementation of the WGTA in 1984 the rationalization process has led to the abandonment, on average, of only 100 miles of grain dependent branch lines per year.

SYSTEM IMPROVEMENT RESERVE

While there is a real potential for cost savings through removal of a high cost branch line from service, it is recognized that this could also result in higher costs for producers who previously delivered grain to points on the line. With the objective of reducing long term system costs and improving the efficiency of the grain transportation system, a compensation

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program to offset the added costs borne by producers in trucking their grain to less costly lines would facilitate the abandonment of high cost branch lines. This has been a goal of the System Improvement Reserve (SIR) fund established in 1986.

The SIR is a federal government program which has funded over $46 million in alternative service programs since its inception. This is in addition to the government commitment through freight rates outlined earlier. In light of one of the four pillars of the national Agri-Food Policy Review which emphasizes greater self-reliance in the Agri-Food sector and in light of the current federal fiscal position, it is assumed that no further ad hoc federal funding for grain transportation will be available.

BRANCH LINE RATIONALIZATION PROPOSAL

The following proposals are made for consultation in respect of grain dependent branch line rationalization.

III.1. The need to accelerate the pace of grain dependent branch line rationalization to reduce costs and improve efficiency is accepted. The rationalization process needs, however, to be evolutionary and provide for full industry participation and a reduction in the pressures on government

III.2. As indicated in the SGTC study in 1986, it is the first two quartiles of lines that are low density and high cost for which short haul trucking is generally a cheaper alternative. Wholesale abandonment of grain dependent branch lines is not therefore appropriate.

III.3. It is therefore proposed that a new Schedule III listing approximately 3,000 miles of line as candidates for rationalization, be included in the WGTA. This list would be based on the first two quartiles of lines from the SGTC study updated as required for subsequent abandonments and modifications of status.

III.4. It is proposed that Section 41 of the Act be expanded to ensure that Schedule III lines are designated grain dependent and continue to be protected from the rail abandonment process of the NTA 1987. The Prohibition Orders on Schedule III lines would be lifted by the Governor-in- Council simultaneously with passage of amendments to the Act.

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III.5. Compensation funding for producers be made available from savings in railway costs with the balance of savings passed on to shippers in the form of lower freight rates. With some important technical qualifications relating to the inflation-sharing provisions of the Act, this is the means currently in effect under Section 60 to provide for federal government payments to Central Western Railway and Southern Rails Co-operative. However, Section 60 may not be used to fund alternate service other than rail service. This proposal will therefore require amendments to the freight rate structure in order to provide funds for a broader range of alternate service. Details of the sourcing of funds and the amounts required will be addressed later in the paper. Note, however, that in the event that all the federal government commitment through the freight rates is redirected (e.g. paid to producers), an alternative source of funds would be required since all savings in railway costs would be passed on to shippers in lower freight rates. Under such circumstances a portion of redirected funds should be retained by the federal government as a compensation fund for producers.

III.6. It is proposed that Section 17 of the Act be amended to expand the authority of the Grain Transportation Agency (GTA) Administrator to enter into agreements for Schedule III lines to provide for the payment of contributions to alternate service in amounts not to exceed line cost savings.

III.7. It is also proposed that the criteria for alternate service be the same as the current SIR fund criteria, namely:

a) to reduce long-term system costs and to improve the efficiency of the grain transportation system;

b) to provide for alternate service to December 31, 1999 for producers on high cost branch lines which will result in the abandonment of these lines through either
(i) a producer trucking program; or

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(ii) a transitional off-track elevator program for a period not to exceed three years and followed by a producer trucking program.

III.8. Consideration could be given to extending the SIR criteria to provide for alternate service by short line railway with federal government payments not to exceed levels in (b) above. An extension of the criteria would apply to any new short line railway or to the expansion in the network of any existing short line railway and thereby ensure that short line railways are truck competitive in the long term in the event that the federal government commitment is redirected. Under these circumstances Schedule III lines should also be protected from the conveyance provisions of Section 158 of the NTA 1987.

III.9. Upon entering into an agreement under amended Section 17, the Administrator would be required to give notice to the NTA within 30 days of such an agreement and the notification will automatically lift the protection of the line afforded by Schedule III.

III.10. The railway would then be able to apply for abandonment of the line or for conveyance of the line to a short line railway under the current provisions of the NTA 1987. This would protect the existing rights of all parties.

III.11. Consideration can also be given to a fast-track approach to grain dependent branch line rationalization including such options as:

a) providing guidelines to the GTA Administrator that require no less than 250 miles of line per year to be the subject of alternate service agreements with a ceiling of 500 miles of line per year. This could be in effect until the year 2000.

b) amendment of Section 165 of the NTA 1987 to eliminate the possibility of postponement of abandonment by the Governor-in-Council; and

c) a fast-track approach could also include elimination of the NTA abandonment process subject to the provision of alternate service.

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ROAD IMPACT

There is no consensus on the road impact of extra truck hauls resulting from the abandonment of branch lines.

It is expected that longer truck hauls to elevators will increase utilization of commercial trucking with a resultant decrease in the use of producer-owned trucks. This could very well reduce road damage caused by trucks as commercial truckers use large capacity trucks with more axles and thus reduced load per axle. Another positive feature of commercial trucking is that as provincially licensed carriers they tend to adhere to imposed provincial weight limitations. Producer-owned trucks, however, have a greater tendency to exceed imposed weight limits. Increased enforcement regarding adherence to weight limits could be a significant factor in reducing current road damage caused by trucks.

The nature of the lines which would be included in Schedule III is such that any road impact that may occur would likely have been experienced eventually in any event through the normal process of elevator consolidation and branch line rationalization. The establishment of a compensation program for producers will no doubt accelerate this process. It is noted that there is strong industry support to accelerate the current pace of branch line rationalization.

III.12. All factors considered, road impact compensation for municipalities and provincial governments is not proposed. It is noted that this is consistent with the recommendation of the SGTC.

IV. TERMINALS AND PORTS

CHURCHILL

It has long been recognized that transporting grain to Churchill for export involves significantly higher railway costs than alternative routes to export markets. The CN Adjustment factor in the WGTA specifically requires a special payment to CN on an annual basis for operating the line to Churchill. The amounts paid under the CN Adjustment are only for the cost of operating the line and must be paid regardless of the level of traffic. For crop year 1989/90 this payment was $6.6 million and for the current 1990/91 crop year the cost is $8.1 million or over $20 per tonne for each year.

The cost of moving grain to Churchill is in addition to these costs and is paid for through the WGTA freight rates from points of origin on the prairies to Churchill. However, supporters of Churchill argue that the port provides benefits to producers because it enables them to avoid the $20-$25 per tonne in extra transportation and handling costs that are incurrred when grain is moved through the Seaway.

The relative importance of Churchill to Canada's grain industry has been declining steadily since the 1970's. The 10 year moving average of grain shipments through the port was 606,000 tonnes in 1977/78 and with two exceptions has declined every year since. For crop year 1990/91, the 10 year average will be approximately 433,000 tonnes or 31% below that of the late 1970's.

The Transportation Committee report identified significant capital investment requirements in the near future to maintain Churchill as a grain port. As standard railway covered hoppers cannot be operated on the line, over $75 million will be required to purchase rail cars to replace the aging Churchill-dedicated box car fleet and a further $100 million will be required to upgrade the line.

In view of these significant capital requirements, options for the future of the Port of Churchill and the rail line should be examined.

SEAWAY

It has been suggested that the competitive position of the Seaway could be enhanced through changes in the WGTA, Seaway cost reductions and reduced regulation.

Some Seaway supporters had suggested that rail freight rates for grain should be cost related rather than distance related and that this would encourage use of the Seaway. The rationale was that the higher cost route through the mountains should be reflected in higher rates westbound and the lower cost route to Thunder Bay should result in lower rates eastbound.

Pressure for cost related rates could very well result in counter pressure from Alberta and western Saskatchewan interests in the form of proposing changes in the CWB pooling arrangements. Changes in CWB pooling would require Manitoba and eastern Saskatchewan grain shippers to bear an increased proportion of shipping costs through the Seaway system compared to the present

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pooling arrangements wherein these costs are shared by all shippers in the pool account. The net result of implementing both cost related rates and CWB pooling changes would be that shippers on the Eastern Prairies would incur higher net transportation costs because the reduction in rail costs would be more than offset by higher Seaway costs.

Substantially reduced European markets for grain, increased markets through west coast ports and higher net returns to producers have led to decreased Seaway usage. Implementation of cost related rates will not change that.

It is noted however that if changes to CWB pooling arrangements were contemplated this would strengthen the argument for cost related rail rates, otherwise eastern prairie grain shippers would be supporting the higher cost mountain route for their western prairie counterparts.

Implementation of measures to reduce costs through the Seaway system such as reduced CWB insurance, revised transfer elevator tariffs, reduced pilotage requirements, ship to ship transfers of grain, closer coordination of elevator and vessel operations and crew size reductions are worthy of further study but could not be addressed in this paper due to time constraints.

In passing, it is noted that ship to ship transfers of grain have the potential for significant cost savings. However, aside from the technological problems to overcome in such an operation there is also the difficulty of convincing a foreign customer to accept the load under these circumstances as the CGC would be weighing the grain into domestic carrier but could not guarantee that the same weight of grain was transferred to the foreign vessel.

V. FREIGHT RATE LEVEL AND STRUCTURE

RAILWAY COST ESTIMATES AS A BASIS FOR RAILWAY REVENUES

One option in the report of the Transportation Committee would eliminate the regulation of railway freight rates for western grain under the WGTA and permit commercial freight rates, subject to the same provisions of the National Transportation Act, 1987 as other commodities. As indicated earlier, it is assumed that if there is a change to the method of payment it would be phased in over a number of years. As a result, there will continue to be a lack of effective competition from other modes. Therefore, it is proposed that rail freight rates continue to be regulated for the time being.

As noted earlier in this report, the current regulated rates are designed to provide the railways with revenues equal to total estimated railway costs. Cost reduction and efficiency improvement measures therefore require an examination of railway cost estimates. On the one hand, railway cost estimates do not include the capital costs associated with the fleet of government-owned hopper cars or assets provided by the federal government under the prairie branch line rehabilitation program. On the other hand, railway cost estimates do include CN capital costs at a cost of capital rate applicable to CP and cumulative railway productivity savings for a four year period until the next costing review by the NTA. A contribution to railway constant costs is also set by the WGTA at 20 percent of volume-related variable costs.

The balancing of these cost elements at the time of the passage of the WGTA and the combining of individual CN and CP costs into total costs were designed to provide for:

- adequate revenues to railways for work performed in a stable investment climate;

- a competitive dynamic between CN and CP to reduce costs; and

- the sharing of some railway productivity savings with shippers through incentive rates.

The need to maintain the competitive dynamic and to provide the incentive for continued railway productivity savings is recognized. For example, a reduction in railway car cycle times by one day at periods of peak movement is estimated to reduce grain transportation costs by $3 million annually. Another example is that an overall productivity saving of one percent in volume-related variable costs results in an estimated cost reduction of $10 million annually. The following proposals are therefore made in respect of the cost base and railway revenue requirements:

V.1. The cost base remain unchanged including the contribution level. It is noted that in absolute terms, as volume-related variable costs are reduced the total contribution will also decline.

V.2. The valuation of CN capital costs at a cost of capital rate applicable to CP provides CN with a better return on investment than would be the case if a CN cost of capital rate were applied. It is therefore proposed that the CN Adjustment payment for extra costs incurred by CN in hauling grain to Prince Rupert be discontinued as a means of offsetting the extra costs generated by the contribution factor.

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V.3. In view of the proposal discussed later on to compensate CN for the Churchill line costs by means of a direct payment, it is further proposed that all government payments to CN as a CN Adjustment under Section 57 be eliminated.

V.4. In view of the regulatory burden associated with a costing review every four years and the effect of a periodic elimination of railway savings on the sharing of savings with shippers, it is proposed that costing reviews under Section 38 be suspended until the year 2000.

V.5. In the meantime, it is proposed to amend Section 40 so that annual estimated railway revenue requirements through the freight rates be determined by indexation for annual railway price increases, less a fixed downward adjustment to represent a sharing of railway productivity savings. Consultation will be required to determine the level of the fixed downward adjustment and a process for its review and revision as required.

INCENTIVE RATES

Incentive rates were intended to provide grain shippers with the opportunity to share in cost savings generated from efficiencies gained in the gathering of grain.

Although the WGTA was effective January 1, 1984 it was not until the 1987/88 crop year that incentive rates were first introduced on a limited basis from some CN shipping points. The next crop year CP also offered incentive rates, however, the annual volumes of grain traffic moving under incentive rates have been relatively small. For example, the incentive rate traffic of CN has been estimated at 500,000 tonnes for crop year 1989/90.

The most significant impediments to more widespread use of incentive rates have been cited to be

- the seven month advance notice period,
- the requirement that the rates remain in effect for the full crop year, and
- the NTA decision during the most recent four year, cost review which adversely affected the railways productivity savings and thus will limit their ability to offer future incentive rates.

Under the previous proposals V.4 and V.5 in the Railway Cost Estimates section, the railways would retain productivity savings beyond the level represented by the fixed downward adjustment for an extended period of time. This would eliminate one impediment to the negotiation of incentive rates between railways and shippers.

Other incentive rate impediments could be removed through the following proposals:

V.6. The incentive rate provisions of Section 46 be relaxed to permit the railways to enter into contracts with grain shippers for the movement of grain at lower freight rates under agreed terms and conditions. The contract rates could be filed with the NTA at any time during the crop year and published concurrently with the rates becoming effective immediately for a minimum period of 90 days. The immediate effectiveness of the reduced rate is consistent with Section 117(2) of the NTA, 1987 and the filing with the NTA is as required under Section 118 of that Act for WGTA grain rates.

V.7. If the notification does not contain a maximum period the rates shall remain in effect until such time as the railway files notice with the NTA and publishes concurrently that the rates will terminate 30 days from the publication date. This is consistent with Section 117(1) of the NTA, 1987 relating to notification of rate increases.

V.8. Confidential contracts are not proposed in order to keep grain rate information available to grain shippers and producers.

V.9. Section 48 of the WGTA be amended to be consistent with the rate appeal provisions of the NTA, 1987. Since the WGTA became effective in 1984 the enactment of the NTA, 1987 changed many of the former tariff provisions under the Railway Act to enhance competition. As before, freight rates are required to be compensatory. Incentive rates agreed to under the WGTA are effectively agreed charges under Sections 121 to 128 of the NTA, 1987.

CURRENT FREIGHT RATE STRUCTURE

There are a number of distributive effects associated with the railway cost structure for the movement of western grain and there are a number of rate structure issues associated with these effects. The cost economies of distance involved in rail

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transportation is currently addressed by the rate taper specified in the base rate scale in Schedule II of the WGTA. Differences in railway costs by route to the West Coast and coastal destination, specifically the CN route from Edmonton to Vancouver versus the CP route from Calgary to Vancouver and the longer CN route to Prince Rupert, are associated with the route equalization and port parity provisions of Section 45.

In light of these issues and the exceptions in Section 47 for competitive and contiguous originating points,the rate structure may be described as generally distance- related. It is also noted that the abandonment of a segment of rail line may require some grain traffic to take a more circuitous route to destination at a freight rate which is higher as a result of the additional distance. On occasions, this has been cited as an impediment to branch line rationalization.

FREIGHT RATE PROPOSAL

On the broad issue of the appropriateness of the freight rate structure, it is important to recognize that, while both the shipper and government portions of the freight rate are simple multiples of the base rate scale, it is only the shipper portion of the freight rate that provides the pricing signals to producers and shippers for the efficient use of rail transportation. In the presence of significant government payments directly to railways through the freight rate, discrepancies between the railway cost structure and the total rate structure are largely irrelevant. It is the shipper rate structure that requires examination in respect of efficiency.

The generally distance-related shipper rate structure provides a measure of differentiation between producers based on geographical distance from markets as the railways must perform more work to transport the grain greater distances to those markets. The shipper rate structure does not, however, differentiate between producers delivering to points which require the railways to perform more work to gather the grain, such as from low density lines. This is not conducive to the efficient use of the transportation network.

Considering the foregoing factors, the following freight rate structure is proposed:

V.10. The freight rate structure shall continue to be generally distance-related.

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V.11. In establishing the tariff of rates from specific points, consideration will be given to "freezing" distances when rail lines are abandoned in cases where distances would increase and result in circuitous routings . This would address concerns that the current provisions are an obstacle to branch line rationalization.

V.12. In view of the proposal in V.3. to eliminate government payments to CN as a CN Adjustment, consideration will be given to eliminating the port parity provisions.

V.13. Shipper freight rates for grain at all points on lines listed in the proposed Schedule III could be subject to a surcharge of $3.00 per tonne and indexed annually for railway price increases. The surcharge would be assessed by reducing the government share of the freight rate by the $3.00 and increasing the shipper share by an equivalent amount for all delivery points located on Schedule III lines. This would reflect the higher operating costs of such lines, encourage further rationalization and provide an additional source of compensation funds. In the event of line rationalization, all producers historically delivering to the line will retain the right to compensation for alternate service.

V.14. Consideration could be given to implementing an east-west freight rate differential to reflect the difference between shipping to Thunder Bay as opposed to the higher cost route through the mountains to West Coast ports. This cost differential could be converted to a mileage equivalent by relating it to the freight rate scale. The cost differential could then be reflected in the freight rates charged through constructive mileages wherein half the differential would be subtracted from the Thunder Bay rates and half would be added to West Coast rates. Again this would be consistent with other changes designed to reflect higher cost components of the system in the rates assessed.

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These proposals for the freight rate structure can be implemented with or without a change in the method of payment on the assumption that a change in method of payment would be phased in over a number of years. In that case, at least part of the government commitment would be paid to the railways during the transition period.

VI. GOVERNMENT COMMITMENT

As indicated earlier, the proposal for compensation funding would require some amendment to the way in which the government commitment is delivered. The Transportation Committee report identified two options for sourcing funds in the event that a significant portion of the government commitment continues to be paid directly to railways:

i) funding could be removed from the government commitment through the freight rate in a manner similar to the funding provision for Central Western Railway and Southern Rails Co-operative under Section 60;

ii) the line-related variable costs could be removed from the cost base used to determine freight rates and paid directly to railways by government. Upon line rationalization the savings to government would be one source of funding for compensation and the net savings could be returned to shippers and producers through subsequent shipper freight rates.

Once again it is the relative impact of these options on shipper freight rates that is important for transportation efficiency. The experience to date in estimating net savings from short line railway operations has shown that the inflation sharing provisions of the WGTA and the timing of costing reviews can have the perverse effect of increasing the proportion of the freight rate paid by shippers when Section 60 is invoked. This is an inappropriate pricing signal and is a result of the complexity of the sharing arrangements. The complex sharing arrangements can also lead to instability in shipper freight rates and this unpredictability is not conducive to market responsiveness and the efficient use of transportation. The following proposals are therefore made in respect of the source of compensation funds for alternate service.

VI.1. The estimated cost base used to determine railway revenue requirements through freight rates would be restricted to volume-related variable costs and the associated contribution to fixed costs.

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VI.2. The line-related variable costs of the railways would be paid directly by the federal government to CN and CP annually on the basis of the mileages of grain dependent branch lines operated by each company multiplied by the average cost per mile. The costs would be indexed annually for railway price increases. An exception to the basis of payment will be made in the case of the CN Herchmer Subdivision to Churchill where the additional costs will be paid directly to CN.

VI.3. This grain dependent branch line payment program would be the source of funding of compensation for alternate service. The recent study conducted under the direction of the SGTC referred to earlier, suggests that compensation funding would be required at a level of some 75 per cent of the savings in line-related variable costs as a result of line rationalization. The net savings to government could be returned to shippers and producers through subsequent annual shipper freight rates.

One effect of these proposals would be that the grain dependent branch line program would be an infrastructure program and may be viewed differently in the international trade context.

In determining the balance of the government commitment through freight rates, it should be noted that the payment of the grain dependent branch line program by the government implies that the government assumes responsibility for all inflation in line-related variable costs. Savings in volume-related variable costs as a result of line rationalization imply further productivity savings in the estimated cost base used to determine railway revenue requirements through the freight rates.

Under the present inflation sharing provisions, the shippers are responsible for all inflation for line and volume related costs between 0 and 6 percent and government is responsible for annual inflation in excess of 6%. All cost reductions resulting from price changes and productivity savings which lower the inflation rate towards 6% or increase the rate of negative cost change beyond 0% currently accrue 100% to the federal government. Under these circumstances, the incentive to producers for further cost reductions is reduced. The same holds true when the shipper share limitation provision is in effect.

The following proposals are therefore made in respect of the government commitment through freight rates.

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VI.4. The Crow Benefit be updated to the 1990/91 level of $724.9 ($658.6 million plus the $66.3 million for the cumulative government share of cost change) less the $91.2 million for line-related variable costs paid directly by government to CN and CP and less the $1.7 million for payments directly to Central Western Railway and Southern Rails Co-operative. The updated figure therefore is $632 million.

VI.5. The present inflation sharing arrangements be discontinued so that annual shipper freight rates would be subject to change for all railway price changes and subject to decrease for all the sharing in railway productivity savings.

VI.6. In view of the new safety net programs for grains and oilseeds farmers as part of the broader national Agri-Food Policy Review, the shipper share limitation adjustment could be discontinued.

VI.7. The government commitment through the freight rate would then comprise the $632 million updated Crow Benefit, supplemented by cumulative annual net savings from line rationalization identified in V.13.

VII. OTHER ISSUES

Other issues that did not fit naturally within the context of previous headings are as follows.

CAR ALLOCATION

The CWB recently implemented a system consistent with one of the Transportation Committee Report options wherein, within certain parameters, the grain elevator companies are now allowed to switch their allotment of cars among different train runs within a province. This change provides grain companies with greater flexibility to manage their operations and creates the possibility of being able to take greater advantage of incentive freight rates.

Within the short time-frame available for development of this paper it was difficult to assess the cost and efficiency implications in this area. Rather than suggesting a specific proposal, the following point should be borne in mind in contemplating changes to car allocation procedures.

Grain shippers will ultimately pay for any additional rail cars which are leased or purchased for transporting grain to market. To the extent that revised methods of car allocation could contribute to better utilization of the existing car fleet such changes should be pursued in the interests of controlling system costs to grain producers.

DEMURRAGE

Per diem demurrage charges are not assessed for the inefficient use of rail equipment by shippers and receivers of WGTA grain. The use of rail cars for storage has caused problems in the past but is not a serious problem now.

VII.1 Nevertheless, to ensure that the rail car fleet isused efficiently and that inefficient users pay for excessive delays, a demurrage system could be developed for WGTA grain cars. Demurrage could be assessed and collected by the railways. The demurrage revenue generated is not liable to be significant however it is proposed that all such revenue be paid to the federal government which supplies 80% of the covered hoppers used in grain service. It is important that any demurrage system not impact negatively on the efficiencies created by the pooling arrangements in effect at the ports.

DOUBLE SUBSIDIZATION OF GRAIN MOVEMENTS

To be eligible for the WGTA rates, grain must originate in the designated area and terminate at an eligible port.

From time to time grain has moved from one WGTA eligible port to another to meet sales commitments resulting in double subsidization of grain for most of the movement. This is accomplished by "originating" the car twice within the designated area.

For example, if a car were originally shipped to Thunder Bay at WGTA rates and then it was decided that the grain was required in Vancouver, the car would be returned to Winnipeg under a domestic freight rate. It would then again be originated as a WGTA eligible shipment destined to Vancouver.

The shipper would be required to pay

- the shipper share of the WGTA freight rate from the first prairie origin point to Thunder Bay (1/3 of the total freight rate);

- the full cost of the domestic rate from Thunder Bay to Winnipeg; and

- the shipper share of the WGTA freight rate from Winnipeg to Vancouver (1/3 of the total freight rate).

The federal government would be required to pay its 2/3 share of the total WGTA rate from the first prairie origin point to Thunder Bay and from Winnipeg to Vancouver.

VII.2. To eliminate this inefficient and costly practice, it is proposed that the WGTA be amended to specifically exclude double subsidization of grain movements.

CROSS HAULS

The movement of grain from one port to another is an extreme example of the cross-hauling of grain. In less extreme examples grain from Alberta will be transported to Thunder Bay while at other times similar grain from Manitoba will be transported to Vancouver. This may occur for marketing reasons or to equalize delivery opportunities but the benefits of such cross-hauling should be weighed against the additional transportation costs involved.

In the presence of significant government payments directly to the railways through the freight rate, the additional transportation costs of cross-hauling are understated to shippers and producers and this is not conducive to efficiency. This is one efficiency aspect that cannot be addressed unless government payments are redirected and the shippers bear a significantly large proportion of the freight rate.

JOINT LINE RATES AND RECIPROCAL AGREEMENTS

Sections 49 and 50 of the WGTA deal with joint line rates and reciprocal agreements.

The Act gives the NTA responsibility for joint line rates which are intended to ensure adequate volumes of grain at a particular port through the interchange of grain traffic from one railway to another.

The GTA Administrator is responsible for promoting reciprocal agreements which provide for the interchange of grain between railways. The Act also gives the GTA the responsibility for the administration and control of the government hopper cars.

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Both mechanisms have the same overall objective, which is to ensure the most cost effective movement of grain for Western Canadian producers. However, the railways have strongly opposing views as to which mechanism is the most appropriate.

VII.3. I is therefore proposed that Sections 17(1)(d) and 50(2) of the WGTA be changed to read "establish" rather than "promote" in relation to reciprocal and other arrangements and that Section 50(1) be amended to read "The Commission may, at the request of the Agency, prescribe the amount by which a rate applicable to a joint line movement may exceed..." single line rates. (Commission referred to the former Canadian Transport Commission but now refers to the NTA.)

STATUTORY REVIEW

VII.4. In light of the proposed changes to the WGTA it is recommended that provision be made for a statutory review of all aspects of the Act to be completed at the end of the decade.

IMPACT OF PROPOSALS

A detailed projection of the financial impacts of the combined proposals on shippers, government and the railways is provided in the Appendix. These projections assume that line rationalization will accelerate from 100 miles per year to 300 miles per year, and that rail productivity savings will increase by ½ per cent per year.

Assuming line-related and volume-related price increases of two per cent and five per cent annually and trend-line increases of 700,000 tonnes per year in the volume of grain to be moved, then shippers will see rail transportation cost savings of some $86.4 million per year by crop year 1999/2000. Railways will see revenues decrease by $119.1 million in line with efficiencies achieved in grain transportation while total government payments will remain relatively constant which represents a decline in real terms.

It is also worth emphasizing the simplicity implied by the rate proposals. For an average length of haul between 975 and 1000 miles the proposals imply a total freight rate in 1990/91 of $29.57 per tonne and a government share of $18.90 per tonne after adjusting for the removal of the line-related variable costs from the cost base.

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For 1991/92 assuming a price increase of five per cent and a fixed downward productivity adjustment of 1½% then the total freight rate would be

$30.58 = $29.57 x (1+0.05) x (1-0.015).

Assuming an increase in grain volumes from 33.5 to 34.2 million tonnes then the government share of the freight rate per tonne in 1991/92 would be

$18.51 = $18.90 x 33.5/34.2.

The shipper share of the freight would then simply be the difference

$12.07 = $30.58 - $18.51.

One simple adjustment would be required in future years to reflect a government commitment above $632 million as a result of net savings from line rationalization as illustrated in the Appendix.

IX. LINKAGES BETWEEN EFFICIENCY AND A CHANGE IN METHOD OF PAYMENT

As noted earlier, the proposals contained in this paper could be implemented with or without a change in method of payment. However the impacts on efficiency are likely to be greater in the event of a change in MOP.

In the case of line rationalization, there may be some lines in the proposed Schedule III where trucking would be a cheaper alternative to mainline or short line rail service but, in the presence of significant government payments to railways through the freight rate, the transfer to truck service would not take place. In the event of a change in the method of payment, producers would be faced with the appropriate pricing signals for transportation and would be free to choose the cheapest alternative. It is for this reason also that incentive rates will increase in importance in the event of a change in the method of payment. Railways will likely meet the competition from trucking with lower rates where increased efficiency in grain gathering may be achieved.

As noted previously on page 24, the issue of system inefficiencies that occur as a result of cross-hauls cannot be addressed unless there is a change in the method of payment.

APPENDIX

Detailed projections of the financial impacts of the combined proposals on shippers, government and the railways to crop year 1999/2000 are provided in Tables 1, 2, 3A, 3B and 4 assuming annual price inflation in line-related and volume-related variable costs of 2% and 5% respectively. An annual 700 000 tonne trend-line increase in the volume of grain to be moved is also assumed throughout.

Table 1 provides a projection of railway freight rates under the current WGTA. The figures for 1988 and 1990/91 are actual figures. The effects of costing reviews in respect of 1992 and 1996 have been represented by a reduction in the price indices for volume-related variable costs in 1994/95 and 1998/99. The amount of each reduction has been assumed to be 1% for annual rail productivity savings compounded over four years. The miles of grain dependent branch lines have been reduced by 100 miles per year from 1991/92 onwards to reflect the historical trend. The CN adjustment and adjustments to the Crow Benefit for payments to British Columbia Railway, Central Western Railway and Southern Rails Co-operative have been indexed forward annually for applicable changes as indicated in Table 1. With the current uncertainty in grain prices and the uncertain outcome of the GATT negotiations, the shipper share limitation adjustment has not been applied, and because of the difficulty in projecting forecasting errors in the volume of grain the cumulative tally adjustment has been assumed to be zero.

Based upon the above projections the freight rates per tonne in 1999/2000 for an average length of haul between 975 and 1000 miles are $26.18 for the shippers, $17.90 for the government, for a total of $44.08. In Table 4 is presented the total costs to shippers and government and the corresponding railway revenues based upon these projections. Costs to shippers and government are projected at $1041.9 million and $740.0 million respectively in 1999/2000.

Table 2 provides a baseline projection of railway freight rates under the proposed changes but <u>without</u> the inclusion of the efficiency effects involved. A comparison between Tables 1 and 2, and between the current WGTA projections and the baseline projections in Table 4, therefore provides an estimate of the effect of the proposed changes in methodologies separate from the efficiency effects. In particular, the 1999/2000 costs to shippers and government differ by $8.8 million and $11.5 million respectively while railway revenues differ by $2.7 million. It is apparent that, based upon the assumptions made in the projections, the methodological changes have a small effect on costs and revenues.

Table 3A provides a projection of railway freight rates under the proposed changes but with the inclusion of the efficiency effects. The annual fixed downward adjustment for productivity has been assumed to be 1 1/2% applied to the price indices for volume-related variable costs. The miles of grain dependent branch lines have been reduced by 100 miles in 1991/92 and by 300 miles per year from 1992/93 onwards to reflect the accelerated pace of rationalization. In total some 2,500 miles of line are assumed to rationalized by the year 2000 which is 1,600 miles more than the historical trend. Line-related variable cost savings from rationalization have been estimated by the difference in line-related variable costs with and without rationalization. Compensation payments for alternate service are projected at 75% of line-related variable cost savings and all net savings are returned to shippers in the next crop year by an addition to the federal government commitment through the freight rate. The rate surcharge on Schedule III lines is set at $3.00 per tonne commencing in 1991/92 and indexed annually by the volume-related price index. A total volume of grain subject to surcharge of some 5.2 million tonnes is assumed for 1991/92 and this is projected to decrease by 20% per year.

Based upon the projections in Table 3A, the average freight rate per tonne for shippers in 1999/2000 is $23.92 which is a drop of $2.26 per tonne from the projected figure under the current WGTA. In Table 4 this is projected to reduce costs to shippers by $86.4 million in 1999/2000. For the government, costs are projected to drop slightly from a projected figure under the current WGTA of $740.0 million in 1999/2000 to $739.3 million under the proposed changes. The change includes continuing payment of the additional costs to CN for the Herchner subdivision and, with projected annual increases of 2% for inflation in line-related costs, this is projected at $4.8 million in 1999/2000. The change also includes compensation payments for alternate service which are estimated at $32.0 million in 1999/2000. For the railways, revenues are projected to decrease by $119.1 in 1999/2000 in line with costs decreases as a result of efficiencies achieved by line rationalization.

It may also be noted that anticipated savings in grain handling costs are not included in these figures. These savings result from an increase in the rate of consolidation of the network of primary elevators with a corresponding increase in grain handling turnover at remaining facilities and a net reduction in elevator operating costs.

Finally in Table 3B is presented the projection of railway freights under the proposed changes, with the inclusion of the efficiency effects, and using the simplified calculations.

Differences between Tables 3A and 3B are solely due to rounding. For 1999/2000 the average freight rate is

$$\$40.04 = \$29.57 \times 1.3541$$

where $29.57 is the average freight rate in 1990/91 (adjusted for the exclusion of line-related variable costs from the cost base) and 1.3541 is the price index for volume-related variable costs in 1999/2000. The government share of the average freight rate is

$$\$16.14 = \$18.90 \times 1.0146/1.1881$$

where $18.90 is the government share of the average freight rate in 1990/91; 1.0146 is a government commitment index calculated as

$$1.0146 = \frac{\$632.0 + \$9.2}{\$632.0}$$

where $9.2 million is the net savings from line rationalization returned to shippers in 1999/2000; and 1.1881 is the volume index in 1999/2000 representing trend-line increases in grain movements. The shipper share of the annual freight rate is

$$\$23.90 = \$40.04 - \$16.14$$

except for remaining Schedule III lines where a surcharge of $3.93 per tonne would apply.

TABLE 1: A PROJECTION OF RAILWAY FREIGHT RATES UNDER THE CURRENT WGTA. FIGURES FOR 1988 AND 1990/91 ARE ACTUAL FIGURES.
1% PRODUCTIVITY OVER 4 YEARS CAPTURED IN VOLUME RELATED PRICES AT TWO COSTING REVIEWS AND
100 GRAIN DEPENDENT BRANCH LINE MILES ARE ASSUMED TO BE RATIONALIZED ANNUALLY.

	1988	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000
						($ MILLIONS)					
1 VOLUME OF GRAIN, MMT		33.5	34.2	34.9	35.6	36.3	37.0	37.7	38.4	39.1	39.8
2 LESS VOL OF GRAIN MOVED BY BCR (2% VOL ANNUALLY)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3 VOLUME OF GRAIN MOVED BY CN/CP	31.4	33.3	34.0	34.7	35.4	36.1	36.8	37.5	38.2	38.9	39.6
4 VOLUME INDEX	1.0000	1.0605	1.0828	1.1051	1.1274	1.1497	1.1720	1.1943	1.2166	1.2389	1.2611
5 PRICE INDEX (VOL)	1.0000	1.0923	1.1469	1.2042	1.2644	1.2753	1.3391	1.4061	1.4764	1.4891	1.5636
6 VOLUME RELATED VARIABLE COST OF CN/CP	706.9	818.9	877.9	940.7	1007.7	1036.5	1109.4	1187.1	1269.7	1304.1	1393.9
7 CONTRIBUTION AT 20%	141.4	163.8	175.6	188.1	201.5	207.3	221.9	237.4	253.9	260.8	278.8
8 MILES OF GRAIN DEP BRANCHLINES	6630.9	6388.2	6288.2	6188.2	6088.2	5988.2	5888.2	5788.2	5688.2	5588.2	5488.2
9 LINE RATIONALIZATION INDEX	1.0000	0.9634	0.9483	0.9332	0.9182	0.9031	0.8880	0.8729	0.8578	0.8428	0.8277
10 PRICE INDEX (LINE)	1.0000	1.0581	1.0793	1.1009	1.1229	1.1454	1.1683	1.1917	1.2155	1.2398	1.2646
11 LINE RELATED VARIABLE COSTS OF CN/CP	89.5	91.2	91.6	91.9	92.3	92.6	92.9	93.1	93.3	93.5	93.7
12 ESTIMATED ELIGIBLE COSTS OF CN/CP	937.8	1073.9	1145.1	1220.7	1301.5	1336.4	1424.2	1517.6	1616.9	1658.4	1766.4
13 DIRECT PAYMENT TO CN FOR CN ADJT (2% VOL, 2% PRICE ANNUALLY)		17.9	18.6	19.4	20.2	21.0	21.8	22.7	23.6	24.6	25.6
14 REVENUE REQUIREMENTS OF CN/CP THROUGH THE FREIGHT RATE		1056.0	1126.5	1201.3	1281.3	1315.4	1402.4	1494.9	1593.3	1633.8	1740.8
15 BASE RATE REVENUES	159.5	169.1	172.7	176.3	179.8	183.4	186.9	190.5	194.0	197.6	201.1
16 FREIGHT RATE MULTIPIER		6.24	6.52	6.81	7.13	7.17	7.50	7.85	8.21	8.27	8.66
17 BASE RATE FOR AVERAGE LENGTH OF HAUL OF 1000 MILES, $	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09
18 AVERAGE FREIGHT RATE, $		31.76	33.19	34.66	36.29	36.50	38.18	39.96	41.79	42.09	44.08
19 ESTIMATED GOVT PAYMENTS TO OTHER RAILWAYS											
20 BCR (BASED ON AVG GOVT RATE)		4.7	4.1	4.1	4.0	3.9	3.8	3.8	3.7	3.6	3.6
21 CWR AND SOUTHERN RAILS (2% PRICE ANNUALLY)		1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0
22 FEDERAL GOVT COMMITMENT											
23 CROW BENEFIT		658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6
24 AVERAGE ESTIMATED ELIGIBLE COSTS/TONNE, $		32.25	33.68	35.18	36.77	37.02	38.70	40.47	42.33	42.63	44.61
25 AVERAGE ESTIMATED ELIGIBLE COSTS/TONNE IN PREV YR, $		31.14	32.25	33.68	35.18	36.77	37.02	38.70	40.47	42.33	42.63
26 COST CHANGE/TONNE, $		1.11	1.43	1.50	1.59	0.25	1.68	1.77	1.86	0.30	1.98
27 RATE OF COST CHANGE (%)		3.6	4.4	4.5	4.5	0.7	4.5	4.6	4.6	0.7	4.6
28 MAX SHIPPER SHARE		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
29 SHIPPER SHARE OF RATE OF COST CHANGE (%)		3.6	4.4	4.5	4.5	0.7	4.5	4.6	4.6	0.7	4.6
30 GOVT SHARE OF RATE OF COST CHANGE (%)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31 GOVT SHARE OF COST CHANGE/TONNE, $		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32 CUMULATIVE GOVT SHARE IN PREVIOUS YR, $		1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99
33 CUMULATIVE GOVT SHARE OF COST CHANGE/TONNE, $		1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99
34 VOLUME OF GRAIN MOVED BY CN/CP, MMT		33.3	34.0	34.7	35.4	36.1	36.8	37.5	38.2	38.9	39.6
35 CUMULATIVE GOVT SHARE OF COST CHANGE		66.3	67.7	69.1	70.4	71.8	73.2	74.6	76.0	77.4	78.8
36 SHIPPER SHARE LIMITATION ADJUSTMENT											
37 CUMULATIVE TALLY ADJUSTMENT		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38 FEDERAL GOVT COMMITMENT THROUGH THE FREIGHT RATE		700.6	701.9	702.4	703.0	703.7	704.3	704.8	705.3	705.8	706.2
39 PROPORTION OF RATE TO BE BORNE BY GOVT		0.663	0.623	0.585	0.549	0.535	0.502	0.471	0.443	0.432	0.406

40 PROPORTION OF RATE TO BE BORNE BY SHIPPER	0.337	0.377	0.415	0.451	0.465	0.498	0.529	0.557	0.568	0.594
41 AVERAGE GOVT RATE, $	21.06	20.68	20.28	19.92	19.52	19.16	18.82	18.51	18.18	17.90
42 AVERAGE SHIPPER RATE, $	10.70	12.51	14.38	16.37	16.98	19.02	21.14	23.28	23.91	26.18

TABLE 2: BASELINE PROJECTIONS OF RAILWAY FREIGHT RATES UNDER THE PROPOSED CHANGES. NO ADDITIONAL EFFICIENCIES ARE INCLUDED.
1% PRODUCTIVITY OVER 8 YEARS CAPTURED FOR COMPARISON PURPOSES ONLY IN 1994/95 AND 1998/99.
FOR COMPARISON PURPOSES ONLY 100 MILES OF GRAIN DEPENDENT
BRANCH LINES ARE ASSUMED TO BE RATIONALIZED ANNUALLY.

	1988	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000
						($ MILLIONS)					
1 VOLUME OF GRAIN, MMT	31.4	33.5	34.2	34.9	35.6	36.3	37.0	37.7	38.4	39.1	39.8
2 VOLUME INDEX	1.0000	1.0669	1.0892	1.1115	1.1338	1.1561	1.1783	1.2006	1.2229	1.2452	1.2675
3 PRICE INDEX (VOL)	1.0000	1.0923	1.1469	1.2042	1.2644	1.2753	1.3391	1.4061	1.4764	1.4891	1.5636
4 VOLUME RELATED VARIABLE COST	706.9	823.8	883.1	946.2	1013.4	1042.2	1115.4	1193.4	1276.3	1310.8	1401.0
5 CONTRIBUTION AT 20%	141.4	164.8	176.6	189.2	202.7	208.4	223.1	238.7	255.3	262.2	280.2
6 ESTIMATED VOLUME RELATED COSTS	848.3	988.6	1059.7	1135.4	1216.1	1250.6	1338.5	1432.1	1531.6	1573.0	1681.2
7 REVENUE REQUIREMENTS OF CN/CP/BCR THROUGH THE FREIGHT RATE	848.3	988.6	1059.7	1135.4	1216.1	1250.6	1338.5	1432.1	1531.6	1573.0	1681.2
8 BASE RATE REVENUES	159.5	170.2	173.7	177.3	180.8	184.4	187.9	191.5	195.1	198.6	202.2
9 FREIGHT RATE MULTIPIER	5.32	5.81	6.10	6.40	6.73	6.78	7.12	7.48	7.85	7.92	8.31
10 BASE RATE FOR AVERAGE LENGTH OF HAUL OF 1000 MILES, $	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09
11 AVERAGE FREIGHT RATE, $	27.08	29.57	31.05	32.58	34.26	34.51	36.24	38.07	39.96	40.31	42.30
12 MILES OF GRAIN DEP BRANCHLINES	6630.9	6388.2	6288.2	6188.2	6088.2	5988.2	5888.2	5788.2	5688.2	5588.2	5488.2
13 LINE RATIONALIZATION INDEX	1.0000	0.9634	0.9483	0.9332	0.9182	0.9031	0.8880	0.8729	0.8578	0.8428	0.8277
14 PRICE INDEX (LINE)	1.0000	1.0581	1.0793	1.1009	1.1229	1.1454	1.1683	1.1917	1.2155	1.2398	1.2646
15 LINE RELATED VARIABLE COSTS OF CN/CP	89.5	91.2	91.6	91.9	92.3	92.6	92.9	93.1	93.3	93.5	93.7
16 ESTIMATED GOVT PAYMENTS TO OTHER RAILWAYS											
17 CWR AND SOUTHERN RAILS (2% PRICE ANNUALLY)		1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0
18 GRAIN DEP BRANCHLINE PAYMENTS BY GOVT TO RAILWAYS		92.9	93.3	93.7	94.1	94.4	94.8	95.0	95.3	95.5	95.7
19 LINE RELATED VARIABLE COSTS IF NO RATION AFTER 1990/91											
20 LINE RELATED VARIABLE COST SAVINGS FROM RATION AFTER 1990/91											
21 COMPENSATION PAYTS FOR ALT SERVICE AT 75% OF LRVC SAVINGS											
22 NET SAVINGS											
23 FEDERAL GOVT COMMITMENT											
24 CROW BENEFIT	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6
25 CUMULATIVE GOVT SHARE OF COST CHANGE IN 1990/91		66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
26 ADJUST FOR GRAIN DEP BRANCH LINE PAYTS BY GOVT IN 1990/91		92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
27 CROW BENEFIT UPDATED		632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
28 NET SAVINGS RETURNED TO SHIPPERS AT 100%											
29 FEDERAL GOVT COMMITMENT THROUGH THE FREIGHT RATE		632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
30 PROPORTION OF RATE TO BE BORNE BY GOVT		0.639	0.596	0.557	0.520	0.505	0.472	0.441	0.413	0.402	0.376
31 PROPORTION OF RATE TO BE BORNE BY SHIPPER		0.361	0.404	0.443	0.480	0.495	0.528	0.559	0.587	0.598	0.624
32 AVERAGE GOVT RATE, $		18.90	18.51	18.14	17.81	17.43	17.11	16.79	16.50	16.21	15.90
33 AVERAGE SHIPPER RATE, $		10.67	12.54	14.44	16.45	17.08	19.13	21.28	23.46	24.10	26.40
34 RATE SURCHARGE PER TONNE ON SCHEDULE III LINES, $											
35 VOLUME SUBJECT TO SURCHARGE, MMT											
36 REVENUE FROM RATE SURCHARGE											

TABLE 3A: PROJECTIONS OF RAILWAY FREIGHT RATES UNDER THE PROPOSED CHANGES WITH EFFICIENCY EFFECTS INCLUDED.
ANNUAL FIXED DOWNWARD ADJUSTMENT OF 1.5% FOR PRODUCTIVITY.
100 MILES OF GRAIN DEPENDENT BRANCH LINES RATIONALIZED IN 1991/92, 300 MILES ANNUALLY THEREAFTER.

	1988	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000
						($ MILLIONS)					
1 VOLUME OF GRAIN, MMT	31.4	33.5	34.2	34.9	35.6	36.3	37.0	37.7	38.4	39.1	39.8
2 VOLUME INDEX	1.0000	1.0669	1.0892	1.1115	1.1338	1.1561	1.1783	1.2006	1.2229	1.2452	1.2675
3 PRICE INDEX (VOL)	1.0000	1.0923	1.1297	1.1684	1.2084	1.2498	1.2926	1.3369	1.3827	1.4301	1.4791
4 VOLUME RELATED VARIABLE COST	706.9	823.8	869.8	918.0	968.5	1021.4	1076.7	1134.6	1195.3	1258.8	1325.3
5 CONTRIBUTION AT 20%	141.4	164.8	174.0	183.6	193.7	204.3	215.3	226.9	239.1	251.8	265.1
6 ESTIMATED VOLUME RELATED COSTS	848.3	988.6	1043.8	1101.6	1162.2	1225.7	1292.0	1361.5	1434.4	1510.6	1590.4
7 REVENUE REQUIREMENTS OF CN/CP/BCR THROUGH THE FREIGHT RATE	848.3	988.6	1043.8	1101.6	1162.2	1225.7	1292.0	1361.5	1434.4	1510.6	1590.4
8 BASE RATE REVENUES	159.5	170.2	173.7	177.3	180.8	184.4	187.9	191.5	195.1	198.6	202.2
9 FREIGHT RATE MULTIPIER	5.32	5.81	6.01	6.21	6.43	6.65	6.88	7.11	7.35	7.61	7.87
10 BASE RATE FOR AVERAGE LENGTH OF HAUL OF 1000 MILES, $	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09
11 AVERAGE FREIGHT RATE, $	27.08	29.57	30.59	31.61	32.73	33.85	35.02	36.19	37.41	38.73	40.06
12 MILES OF GRAIN DEP BRANCHLINES	6630.9	6388.2	6288.2	5988.2	5688.2	5388.2	5088.2	4788.2	4488.2	4188.2	3888.2
13 LINE RATIONALIZATION INDEX	1.0000	0.9634	0.9483	0.9031	0.8578	0.8126	0.7673	0.7221	0.6769	0.6316	0.5864
14 PRICE INDEX (LINE)	1.0000	1.0581	1.0793	1.1009	1.1229	1.1454	1.1683	1.1917	1.2155	1.2398	1.2646
15 LINE RELATED VARIABLE COSTS OF CN/CP	89.5	91.2	91.6	89.0	86.2	83.3	80.2	77.0	73.6	70.1	66.4
16 ESTIMATED GOVT PAYMENTS TO OTHER RAILWAYS											
17 CWR AND SOUTHERN RAILS (2% PRICE ANNUALLY)		1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0
18 GRAIN DEP BRANCHLINE PAYMENTS BY GOVT TO RAILWAYS		92.9	93.3	90.8	88.0	85.1	82.1	78.9	75.6	72.1	68.4
19 LINE RELATED VARIABLE COSTS IF NO RATION AFTER 1990/91			93.1	94.9	96.8	98.8	100.7	102.8	104.8	106.9	109.0
20 LINE RELATED VARIABLE COST SAVINGS FROM RATION AFTER 1990/91			1.5	5.9	10.6	15.5	20.5	25.8	31.2	36.8	42.6
21 COMPENSATION PAYTS FOR ALT SERVICE AT 75% OF LRVC SAVINGS			1.1	4.4	8.0	11.6	15.4	19.4	23.4	27.6	32.0
22 NET SAVINGS			0.4	1.5	2.6	3.9	5.1	6.4	7.8	9.2	10.6
23 FEDERAL GOVT COMMITMENT											
24 CROW BENEFIT	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6	658.6
25 CUMULATIVE GOVT SHARE OF COST CHANGE IN 1990/91		66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3	66.3
26 ADJUST FOR GRAIN DEP BRANCH LINE PAYTS BY GOVT IN 1990/91		92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9	92.9
27 CROW BENEFIT UPDATED		632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
28 NET SAVINGS RETURNED TO SHIPPERS AT 100%				0.4	1.5	2.6	3.9	5.1	6.4	7.8	9.2
29 FEDERAL GOVT COMMITMENT THROUGH THE FREIGHT RATE		632.0	632.0	632.4	633.5	634.6	635.9	637.1	638.4	639.8	641.2
30 PROPORTION OF RATE TO BE BORNE BY GOVT		0.639	0.605	0.574	0.545	0.518	0.492	0.468	0.445	0.424	0.403
31 PROPORTION OF RATE TO BE BORNE BY SHIPPER		0.361	0.395	0.426	0.455	0.482	0.508	0.532	0.555	0.576	0.597
32 AVERAGE GOVT RATE, $		18.90	18.51	18.14	17.84	17.53	17.23	16.94	16.65	16.42	16.14
33 AVERAGE SHIPPER RATE, $		10.67	12.08	13.47	14.89	16.32	17.79	19.25	20.76	22.31	23.92
34 RATE SURCHARGE PER TONNE ON SCHEDULE III LINES, $			3.00	3.10	3.21	3.32	3.43	3.55	3.67	3.80	3.93
35 VOLUME SUBJECT TO SURCHARGE, MMT			5.2	4.2	3.4	2.7	2.2	1.8	1.4	1.1	0.9
36 REVENUE FROM RATE SURCHARGES			15.6	13.0	10.9	9.0	7.5	6.4	5.1	4.2	3.5

TABLE 38: PROJECTIONS OF RAILWAY FREIGHT RATES UNDER THE PROPOSED CHANGES WITH EFFICIENCY EFFECTS INCLUDED. AND USING THE SIMPLIFIED CALCULATIONS.

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000
					($ MILLIONS)					
1 VOLUME OF GRAIN, MMT	33.5	34.2	34.9	35.6	36.3	37.0	37.7	38.4	39.1	39.8
2 VOLUME INDEX	1.0000	1.0209	1.0418	1.0627	1.0836	1.1045	1.1254	1.1463	1.1672	1.1881
3 PRICE INDEX (VOL)	1.0000	1.0342	1.0697	1.1063	1.1442	1.1834	1.2239	1.2659	1.3093	1.3541
4 FREIGHT RATE MULTIPLIER	5.81									
5 BASE RATE FOR AVERAGE LENGTH OF HAUL OF 1000, $	5.09									
6 AVERAGE FREIGHT RATE, $	29.57	30.58	31.63	32.71	33.83	34.99	36.19	37.43	38.72	40.04
7 CROW BENEFIT UPDATED	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
8 NET SAVINGS RETURNED TO SHIPPERS AT 100%			0.4	1.5	2.6	3.9	5.1	6.4	7.8	9.2
9 FEDERAL GOVT COMMITMENT THROUGH THE FREIGHT RATE	632.0	632.0	632.4	633.5	634.6	635.9	637.1	638.4	639.8	641.2
10 GOVT COMMITMENT INDEX	1.0000	1.0000	1.0006	1.0024	1.0041	1.0062	1.0081	1.0101	1.0123	1.0146
11 PROPORTION OF RATE TO BE BORNE BY GOVT	0.639									
12 AVERAGE GOVT RATE, $	18.90	18.51	18.15	17.83	17.51	17.22	16.93	16.65	16.39	16.14
13 AVERAGE SHIPPER RATE, $	10.67	12.07	13.48	14.88	16.32	17.77	19.26	20.78	22.33	23.90
14 RATE SURCHARGE PER TONNE ON SCHEDULE III LINES, $		3.00	3.10	3.21	3.32	3.43	3.55	3.67	3.80	3.93

TABLE 4: SHIPPER AND GOVT COSTS, AND RAILWAY REVENUES PROJECTED FOR THE CURRENT WGTA, BASELINE AND WITH EFFICIENCIES. PROJECTIONS ARE DERIVED FROM TABLES 1, 2 AND 3A.

	1990/91			1991/92			1992/93			1993/94			1994/95		
	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF
								($ MILLIONS)							
COSTS TO SHIPPERS:															
PAYMENTS TO CN/CP FOR PROJECTED VOL	356.3			425.3			499.0			579.5			613.0		
PAYMENTS TO BCR FOR PROJECTED VOL	2.1			2.5			2.9			3.3			3.4		
SUBTOTAL	358.4	357.4	357.4	427.8	428.9	413.1	501.9	504.0	470.1	582.8	585.6	530.1	616.4	620.0	592.4
PAYMENTS FOR SURCHARGES						15.6			13.0			10.9			9.0
TOTAL			357.4			428.7			483.1			541.0			601.4
COSTS TO FEDERAL GOVERNMENT:															
PAYMENTS TO CN/CP FOR PROJECTED VOL	701.3			703.1			703.7			705.2			704.7		
PAYMENTS TO BCR FOR PROJECTED VOL	4.2			4.1			4.1			4.0			3.9		
SUBTOTAL CN/CP/BCR	705.5	633.2	633.2	707.2	633.0	633.0	707.8	633.1	633.1	709.2	634.0	635.1	708.6	632.7	636.3
LESS REDUCTION IN PAYT FROM SURCHARGE						-15.6			-13.0			-10.9			-9.0
DIRECT PAYMENTS TO CN FOR ADJUSTMENT	17.9			18.6			19.4			20.2			21.0		
DIRECT PAYMENTS TO CWR/SR ON PROJ VOL	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
GRAIN DEP BRANCH LINE PAYTS TO CN/CP	0.0	91.2	91.2	0.0	91.6	91.6	0.0	91.9	89.0	0.0	92.3	86.2	0.0	92.6	83.3
PAYMENT TO CN FOR ADDITIONAL COST OF HERCHMER (2% PRICE ANNUALLY)						4.0			4.1			4.2			4.3
BALANCE OF PAYTS TO CN/CP						87.6			84.9			82.0			79.0
COMPENSATION PAYTS FOR ALT SERVICE						1.1			4.4			8.0			11.6
TOTAL	725.1	726.1	726.1	727.5	726.3	711.8	729.0	726.8	715.3	731.2	728.1	720.2	731.4	727.1	724.0
GRAND TOTAL COSTS	1083.5	1083.5	1083.5	1155.3	1155.2	1140.5	1230.9	1230.8	1198.4	1314.0	1313.7	1261.2	1347.8	1347.1	1325.4
RAILWAY REVENUES															
CN/CP	1075.5			1147.0			1222.1			1304.9			1338.7		
BCR	6.3			6.6			7.0			7.3			7.3		
SUBTOTAL CN/CP/BCR	1081.8	1081.8	1081.8	1153.6	1153.5	1137.7	1229.1	1229.0	1192.2	1312.2	1311.9	1251.4	1346.0	1345.3	1312.0
CWR/SR	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
TOTAL RAILWAY REVENUES	1083.5	1083.5	1083.5	1155.3	1155.2	1139.4	1230.9	1230.8	1194.0	1314.0	1313.7	1253.2	1347.8	1347.1	1313.8

TABLE 4: SHIPPER AND GOVT COSTS, AND RAILWAY REVENUES PROJECTED FOR THE CURRENT WGTA, BASELINE AND WITH EFFICIENCIES. PROJECTIONS ARE DERIVED FROM TABLES 1, 2 AND 3A.

	1995/96			1996/97			1997/98			1998/99			1999/2000		
	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF	CURRENT WGTA	BASE LINE	WITH EFF
							($ MILLIONS)								
COSTS TO SHIPPERS:															
PAYMENTS TO CN/CP FOR PROJECTED VOL	699.9			792.8			889.3			930.1			1036.7		
PAYMENTS TO BCR FOR PROJECTED VOL	3.8			4.2			4.7			4.8			5.2		
SUBTOTAL	703.7	707.8	658.2	797.0	802.3	725.7	894.0	900.9	797.2	934.9	942.3	872.3	1041.9	1050.7	952.0
PAYMENTS FOR SURCHARGES			7.5			6.4			5.1			4.2			3.5
TOTAL			665.7			732.1			802.3			876.5			955.5
COSTS TO FEDERAL GOVERNMENT:															
PAYMENTS TO CN/CP FOR PROJECTED VOL	705.1			705.8			707.1			707.2			708.8		
PAYMENTS TO BCR FOR PROJECTED VOL	3.8			3.8			3.7			3.6			3.6		
SUBTOTAL CN/CP/BCR	708.9	633.1	637.5	709.6	633.0	638.6	710.8	633.6	639.4	710.8	633.8	642.0	712.4	632.8	642.4
LESS REDUCTION IN PAYT FROM SURCHARGE			-7.5			-6.4			-5.1			-4.2			-3.5
DIRECT PAYMENTS TO CN FOR ADJUSTMENT	21.8			22.7			23.6			24.6			25.6		
DIRECT PAYMENTS TO CWR/SR ON PROJ VOL	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
GRAIN DEP BRANCH LINE PAYTS TO CN/CP	0.0	92.9	80.2	0.0	93.1	77.0	0.0	93.3	73.6	0.0	93.5	70.1	0.0	93.7	66.4
PAYMENT TO CN FOR ADDITIONAL COST OF HERCHMER (2% PRICE ANNUALLY)			4.4			4.5			4.6			4.7			4.8
BALANCE OF PAYTS TO CN/CP			75.8			72.5			69.0			65.4			61.6
COMPENSATION PAYTS FOR ALT SERVICE			15.4			19.4			23.4			27.6			32.0
TOTAL	732.6	727.9	727.5	734.2	728.0	730.5	736.4	728.9	733.3	737.4	729.3	737.5	740.0	728.5	739.3
GRAND TOTAL COSTS	1436.3	1435.7	1393.2	1531.2	1530.3	1462.6	1630.4	1629.8	1535.6	1672.3	1671.6	1614.0	1781.9	1779.2	1694.8
RAILWAY REVENUES															
CN/CP	1426.8			1521.3			1620.0			1661.9			1771.1		
BCR	7.6			8.0			8.4			8.4			8.8		
SUBTOTAL CN/CP/BCR	1434.4	1433.8	1375.9	1529.3	1528.4	1441.3	1628.4	1627.8	1510.2	1670.3	1669.6	1584.4	1779.9	1777.2	1660.8
CWR/SR	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
TOTAL RAILWAY REVENUES	1436.3	1435.7	1377.8	1531.2	1530.3	1443.2	1630.4	1629.8	1512.2	1672.3	1671.6	1586.4	1781.9	1779.2	1662.8